

ABSTRACT

There are provided a recording material for
holograms characterized by low corruption of recorded
data with time, a manufacturing method thereof, a
5 recording medium for holograms, a hologram recording
method and a hologram reproduction method. The
recording material for holograms of this invention
comprises a metal oxide porous body provided with an
oxygen donor substance in the pores. In the recording
10 material for holograms, recording is accomplished by
increasing the oxygen content of the metal oxide porous
body with oxygen from the oxygen donor substance
produced upon irradiation of recording light. The
irradiated sites undergo no further alteration even
15 with additional light irradiation, and the heat-induced
volume fluctuations are negligible. The recording
material for holograms exhibits reduced corruption of
recorded data with time when subjected to repeated
reproduction or when the recorded medium is stored for
20 long periods.